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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,051	01/29/2004	Young-Chin Chen	U 015013-0	4814
140	7590	11/20/2006	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			KUMAR, PREETI	
			ART UNIT	PAPER NUMBER
			1751	
DATE MAILED: 11/20/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/767,051	<b>Applicant(s)</b> CHEN, YOUNG-CHIN	
	<b>Examiner</b> Preeti Kumar	<b>Art Unit</b> 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/6/05</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Applicant's election without traverse of Group I, claims 1-3 in the reply filed on 8/22/2006 is acknowledged.

***Non-Final Rejection***

2. Claims 1-3 are pending.
3. Claim 1 is independent.

***Priority***

4. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) based on Application # 092102230 filed in Taiwan on 1/30/2003. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

***Oath/Declaration***

5. The oath or declaration filed 1/29/2004 is acknowledged by the Examiner.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants recite the language of synthetic fiber fabric. The term " synthetic fiber fabric " in claim 1 is a relative term which renders the claim indefinite. The term " synthetic fiber fabric" is not defined by the claim, the specification

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does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Specifically, Applicants specification provides no guidance as to what is included or excluded by the terminology of "synthetic fiber fabric".

Also, claim 1 is indefinite because it recites the language "...translucent printing (dyeing)..." and later within the claim recites limitation to a printing paste for dyeing and or printing to indicate that the dyeing and printing steps are the same method step. However, Applicants specification US 2004/0182821 in paragraph [0008] indicates that the process of the pending application comprises the steps of presetting, printing, drying, fixing, etching, soaping, dyeing, and final treatment. Thus the specification teaches that the printing and dyeing are 2 separate steps and the claim language seems to indicate that translucent printing and (dyeing) are synonyms of one another? Examiner does not understand if printing (dyeing) are 1 or 2 separate steps in the instant claims:

#### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kielbania (US 4,507,342).

Kielbania teaches a conventional printing paste is prepared of three major ingredients: pigment, thickener and binder. Before these ingredients are mixed to form a print paste, a "cut clear" is formed with a thickener. The cut clear is a translucent gel having a consistency over 100,000 cps. The cut clear functions as a viscosity builder in the paste. Next a color concentrate is prepared by blending a presscake dispersion (a pigment dispersion in water), a cut clear, and water for about 15 minutes until a creamy flowing paste of about 1950 cps viscosity results. See col.32,ln.53-60.

In example 18a Kielbania teaches a control print paste is prepared by mixing 60 parts of a cut clear containing 6% of the nonionic thickener, 4.3 parts of 35% aqueous pigment dispersion, 30 parts water, 5.8 parts of a 60% solids acrylic binder (97 EA/3 a low energy heat curable quaternary ammonium salt vinyl monomer and 0.175 part

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sodium bicarbonate as catalyst. See examples 18 a and b. Kielbania go on to illustrate pigment printed nonwoven polypropylene by applying the pigment paste to Kimberly-Clark spunbonded pinsonic embossed nonwoven polypropylene fabric, by the screen printing process and then cured by heating in a conventional oven at 228 F. for 3 minutes.

Regarding the claimed process of printing prior to etching, Kelbania teaches crosslinking the polymer fabric with a quaternary ammonium salt to provide a particularly dyeable fabric by dyes such as acid dyes, metallized dyes and direct dyes. See col.1,ln.33, col.6,ln.30-45. Kelbania teaches that the quaternary ammonium units provide excellent dye pickup, which printing/dyeing step is a separate step prior to a subsequent chemical etching step with sodium bicarbonate catalyst. See col.8,ln.35-40 and col.14,ln.64, and example.18.

Accordingly, the teachings of Kelbania appear to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Kelbania are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at a process for producing a fabric comprising a process wherein the printing with a quaternary ammonium salt printing developer is done prior to an etching step as recited by the instant claim 1 because Kelbania provides motivation to one of ordinary skill in the art to produce a patterned fabric by a 2 step process and further suggests crosslinking the polymer fabric with a quaternary ammonium salt to produce a particularly dyeable fabric, which

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printing/dyeing step is a separate step done prior to a subsequent chemical etching step with sodium bicarbonate catalyst.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

13. Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner Preeti Kumar PK.  
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DOUGLAS MCGINTY  
SUPERVISORY PATENT EXAMINER

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